

**What is claimed is :**

1.A ferrite cored coil structure for SMD comprising:

a core body having two studs each of them being  
5 protruded out of a side surface of said core body;

two conductor plates having a contact terminal at one end,  
and an extension conducting terminal at the other end, the  
front tip portion of said conducting terminal being cambered  
to form a detention portion which and said conducting  
10 terminal being each respectively fixed to , and rests on one of  
said studs protruded from both ends of said core body;

two insulation blocks each of them being enclosed over  
one end portion of said core body respectively to emerge only  
said conducting terminal and said detention portion of said  
15 conductor plate out of its lateral surface, and;

a coil being formed with continuously and spirally wound  
conductor on part of said core body where being not enclosed  
with said insulation block.

2.The ferrite cored coil structure as in claim 1, wherein  
20 said detention portions are omitted, but alternatively, said  
conducting terminals of said conductor plate are restrained  
respectively by said studs protruded out of both ends of said  
core body.

3.The ferrite cored coil structure as in claim 1, wherein  
25 said insulation block is made of an insulation material such as

epoxy resin.

4.The ferrite cored coil structure as in claim 2, wherein  
said insulation material is heated to melt into liquid state so  
as to be easily enclosed over both end portions of said core  
5 body, after being cooled down, said insulation material  
recovers its original solid state to form into said insulate  
block.

5.The ferrite cored coil structure as in claim 2, wherein  
both terminals of said coil are respectively connected to  
10 corresponding conducting terminals of said conductor plate.

6.The fabrication method of a ferrite cored coil structure  
for SMD comprising the steps:

restraining the conducting terminals and the detention  
portions of the conductor plate both of them being  
15 symmetrically formed on two ends of a component unit of a  
conducting bracket on the studs protruded from both ends of  
the ferrite cored coil;

enclosing two end portions of said cored coil with the  
insulation blocks by molding process in a mold, and emerging  
20 a connector portion at each end so as to expose said  
conducting terminals and said detention portions of said  
conductor plates at the lateral surfaces of said insulation  
block, then connecting a plurality of core bodies together with  
their insulation blocks in series through the connector  
25 portions remaining said conducting terminals and said

detention portions of said conductor plates to be restrained on said studs of said core body;

punching down the contact terminals of said conductor plate emerging out of said insulation block from the  
5 component unit of said conducting bracket by means of punching process;

forming the coil with a string of conductor spirally wound on the portion of core body where being not enclosed with said insulation block and then connecting its two  
10 terminals respectively to the corresponding conducting terminals of said conductor plate;

punching down the connector portion emerging out of each end of said insulation block by means of punching process; and

15 finishing said fabrication process of said ferrite cored coil structure for SMD.